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Patents Trademarks Trade Secrets

Box Non-Fee Amendment Commissioner for Patents Washington DC 20231

Re:

Pearsall et al 09/939,449

Filed 8/25/2001

For: "Edge Sharpener"

March 13, 2003

Art Unit 1772

Examiner Patricia Nordmeyer

Sir:

This is in response to the Official Action of December 18, 2002.

Confirmation of Election

Applicants confirm the election to prosecute claims 1-19 and 23-25, which Examiner has defined as Group I.

Amendments

Please amend the claims as follows:

1. [Amended] An article useful for edge sharpening comprising a metal body having at least one honing surface coated with a ceramic created in an electrolytic bath, said honing surface characterized by a surface finish of Ra 120 to Ra 10.

Cancel claim 4.

- 16. [Amended] An article of claim 15 wherein said abrading [area] surface is affixed to a recess in the surface of said article.
- 17. [Amended] An article of claim 15 wherein said abrading [area] <u>surface</u> comprises silicon carbide, diamond, or aluminum oxide.
- 25. [Amended] An edge sharpening device of claim 23 including at least one of a V groove and an abrasive strip.

Remarks

Addressing now the citation of Section 112 in paragraphs 7 and 8, applicants have amended claims 1, 16 and 17 to clarify the difference between honing and abrading, as used by applicants. See the definitions in paragraph 26 of the specification. Applicants have included their technical definition of a honing surface in claim 1, and conformed claims 16 and 17 to the appropriate antecedent, which is a surface. The definitions provided for honing and abrading are significant in the art. Applicants believe there can no longer be a question of clarity, definiteness, or vagueness. Claim 4 is canceled because it is substantially redundant with respect to an abrading surface, in view of claim 9. See the definition of an abrading surface in paragraph 0026 of the specification.

Next, in paragraph 10, the Examiner rejects claims 1-5, 8-11, and 18 under 35USC102, citing various passages of the Campione et al patent for elements of the claims. Applicants submit that the Campione et al patent does not anticipate applicant's invention as stated in claim 1 or any of the other claims in this rejection, if only for the reason that Campione et al do not have a ceramic coating. Their sharpening surface is a monolithic stone, and they repeat throughout that the stone can easily be removed from the other parts. Applicants' honing surface is a ceramic coating adhering to the metal body. Campione et al do not come close to using this important part of applicants' invention. Please note also that Campione's description of his stone as having a "composition such as aluminum oxide, silicon carbide, diamond..." while similar to applicants' description of an abrading material in applicants' paragraph 0026, this is not the ceramic coating material but rather a gritty substance used for the abrading surface. The ceramic surface is preferably generated by the action of the modified shaped-wave electric current in the electrolytic bath of the type described, acting on the metal body. No such ceramic coating, created by any method, is described in any of the references.

Cozzini et al is used under Section 102 to apply against claim 25, the Examiner citing passages said to describe a V groove and an abrasive strip. But it is clear that Cozzini et al use two adjacent balls to define a notch – see the abstract – rather than a groove. Two balls contact each other at a single point, while a groove is defined by the intersection of two planes to form a line. Note that in Cozzini's case, the two balls are "offset" (column 2, line 8) from slot 5 – see Figure 3. Applicants' V groove does not attempt to contort the blade or pointed object to be sharpened in this manner. What Examiner calls an abrasive strip is described by Cozzini as an edge straightener. It is not made of stone or other abrasive material, but simple case hardened steel, and is used to "straighten out any rolled, curled, or turned cutting edges..." (column 2, lines 54-57) by re-forming the nicks, projections, or otherwise distorted parts of the edge, not by abrading them. This is not an abrasive strip.

In Examiner's paragraph 13, both Campione et al and Cozzini et al are applied under Section 103 to claims 6, 7, 23, and 24. But again, with respect to claims 6 and 7, which are dependent on claim 1, Campione et al do not have a ceramic coating on anything. The various surface contours, tapers and V's shown in Campione and Cozzini, and perhaps other references, are not present in a ceramic coating generated on a metal surface, as applicant has done. Examiner has not reconstructed applicants' invention through any combination of references.

Again, in paragraph 14, claims 12, 15-17, and 19 are rejected on a combination of Campione et al with Cohen, who is cited for a rounded edge and a triangular profile. However, Cohen's abrasive is aluminum oxide, which is embedded in ceramic – the ceramic is not used as a honing surface as applicants' is, since the aluminum oxide particles would prevent such a use. All of the claims rejected in this paragraph presuppose the presence of a ceramic honing surface as recited in claim 1; this is not shown in any of the references, and Examiner has not reconstructed applicants' invention.

In Examiner's paragraphs 15 and 16, all three of the above discussed references are applied against claim 13 and 14, but again the element of a ceramic honing surface is missing. Applicants are aware that triangular sharpening surfaces have been used before, but not with a surface such as applicants'. Further, Cozzini's V groove and other parts named by Examiner are not used in a context that includes a ceramic coating such as applicants use.

No evidence of obviousness has been presented with respect to the ceramic coating applicants use on a metal body. The rejections should be reconsidered.

The above amendments, and complete sets of marked-up and "clean" claims after the amendments, are shown on separate sheets appended hereto.

Respectfully submitted,

William L. Krayer

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I hereby certify that the application/correspondence attached hereto is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37CFR1.10 on the date indicated above and is addressed to the Assistant Commissioner of Patents, Washington DC 20231.

Signature of person mailing correspondence

William L. Krayer

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